

BEST AVAILABLE COPY

Serial No. 09/988,965
Page 2 of 14IN THE CLAIMS

1. (previously presented) A router for routing a frame, comprising:
 - a first memory;
 - a route-information-receiving unit for receiving route information transmitted by an adjacent router;
 - a route-information-writing unit for storing said information on a route into said first memory;
 - a route-information-transmission control unit for controlling transmission of said information on a route to adjacent routers;
 - a route-information-change-reporting unit for reporting a change in information on a route involving a particular adjacent router to adjacent routers other than said particular adjacent router if information on a route has not been received from said particular adjacent router for at least a predetermined period of time;
 - a relay-processing unit for routing a received frame on the basis of said route information stored in said first memory;
 - a temporary-halt-start-informing unit for transmitting a temporary-halt-start notification message indicating a start of a temporary halt to adjacent routers in the event of said temporary halt; and
 - a temporary-halt-recovery-informing unit for transmitting a temporary-halt-recovery notification message indicating a recovery from a temporary halt to adjacent routers in the event of said recovery from said temporary halt, wherein

84189745_1

BEST AVAILABLE COPY

JAN 29 2007

Serial No. 09/988,965
Page 3 of 14

said temporary halt temporarily halts a process relating to routing including a transmission of said information on a route, and said recovery restarts the process relating to routing including a transmission of said information on a route.

2. (original) A router according to claim 1, further comprising:
a second memory;
a route-information-saving unit for saving route information stored in said first memory to said second memory in the event of a temporary halt; and
a route-information-restoring unit for restoring information on a route from said second memory back to said first memory in the event of a recovery from a temporary halt.

3. (original) A router according to claim 1, wherein, in the event of a temporary halt, said temporary-halt-start-informing unit informs other adjacent routers of a time to recovery from said temporary halt.

4. (original) A router according to claim 1, further comprising:
a temporary-halt-start management unit for inputting a notification of a start of a temporary halt from an external source and passing on said notification to said temporary-halt-start-informing unit; and
a temporary-halt-recovery management unit for inputting a notification of a recovery from a temporary halt from an external source and passing on said notification to said temporary-halt-recovery-informing unit.

841897+5¹

BEST AVAILABLE COPYSerial No. 09/988,965
Page 4 of 14

5. (previously presented) A router for routing a frame, comprising:

- a first memory;
- a route-information-receiving unit for receiving information on a route transmitted by an adjacent router;
- a route-information-writing unit for storing said information on a route into said first memory;
- a route-information-transmission control unit for controlling transmission of said information on a route to adjacent routers;
- a route-information-change-reporting unit for reporting a change in information on a route involving a particular adjacent router to adjacent routers other than said particular adjacent router if information on a route has not been received from said particular adjacent router for at least a predetermined period of time;
- a relay-processing unit for routing a received frame on the basis of said route information stored in said first memory;
- a temporary-halt-start-notification-receiving unit for receiving a temporary-halt-start notification message indicating a start of a temporary halt of an adjacent router from said adjacent router in the event of said temporary halt;
- a route-information-temporarily-locking unit for requesting said route-information-change-reporting unit to temporarily lock a process to report a change in information on a route involving a particular adjacent router to adjacent routers other than said particular adjacent router when a temporary-halt-start notification message indicating a start of a temporary halt of a

84189745_1

BEST AVAILABLE COPY

Serial No. 09/988,965

Page 5 of 14

process relating to routing including a transmission of said information on a route of said particular adjacent router is received from said particular adjacent router;

a temporary-halt-recovery-notification-receiving unit for receiving a temporary-halt-recovery notification message indicating a recovery from a temporary halt of an adjacent router from said adjacent router in the event of said recovery from said temporary halt; and

a route-information-temporary-lock-ending unit for requesting said route-information-change-reporting unit to end a state to temporarily lock the process to report a change in information on a route involving a particular adjacent router to adjacent routers other than said particular adjacent router when a temporary-halt-recovery notification message indicating a recovery from a temporary halt of said particular adjacent router is received from said particular adjacent router.